

MBBS Final Professional Examination

MEDICINE

**Objectively Structured Performance Evaluation
(OSPE)**

Model Paper

INSTRUCTIONS

1. Please read the questions carefully and answer **ONLY** what is asked.
2. Use specific terms where possible.
3. Be precise and to the point.

1. Look at the pictures of a 25 year old woman complaining of difficulty in closing one eye:
 - a) What condition does she have?
 - b) What is the neurological deficit?
 - c) On which side is the lesion?



TOPIC SPECIFICATION: NEUROLOGY

2. This 45 year old hypertensive male was brought to the emergency with sudden excruciating headache and loss of consciousness.
- What is the abnormality seen on CT scan of the brain?
 - Name two common causes.
 - List 2 steps in management.



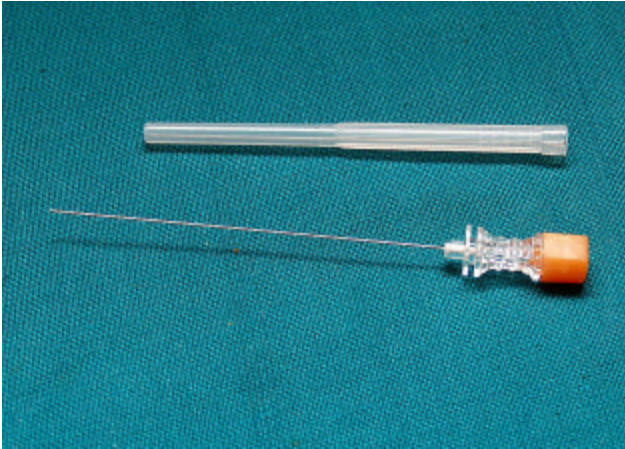
TOPIC SPECIFICATION: NEUROLOGY

3. This forty five year old female has had pain and stiffness of several joints in the body for a decade.
- a What is the diagnosis
 - b Name two drugs used to modify the disease
 - c Name one physical abnormality seen in the picture



TOPIC SPECIFICATION: RHEUMATOLOGY

4. Instrument: (the actual instrument may also be shown)



- a) Identify the instrument.
- b) Give three important indications.
- c) Give three important contraindications.

TOPIC SPECIFICATION: INSTRUMENT IDENTIFICATION

5. Drug identification: (Injection Dexamethasone should be provided)
- List three important side effects of the given drugs.
 - List three important indications.
 - What will happen to serum cortisol level after its administration?



TOPIC SPECIFICATION: DRUG IDENTIFICATION

6. Look at the picture of a 25 year old man complaining of an painful and itchy rash on the chest.
- a) Identify the lesion.
 - b) What is the causative microorganism.
 - c) Name one specific therapy.



TOPIC SPECIFICATION: DERMATOLOGY

7. This chest X-ray is of a 27 year old lady who presented with dyspnoea for the last many months. On examination there is atrial fibrillation and mid diastolic murmur at the mitral area.
- Name two X-ray abnormalities.
 - What is the most likely underlying valvular lesion?
 - What is the commonest cause of this lesion in Pakistan?



TOPIC SPECIFICATION: CARDIOLOGY

8. A 35 year old female presents with weight loss, tremors, diarrhoea, and inability to sleep at night. On examination she is looking extremely agitated and has fine tremors of the fingers. Her eyes are looking very prominent.
- What is the most likely diagnosis?
 - Name three physical signs which may be present in this patient.
 - List two investigations.



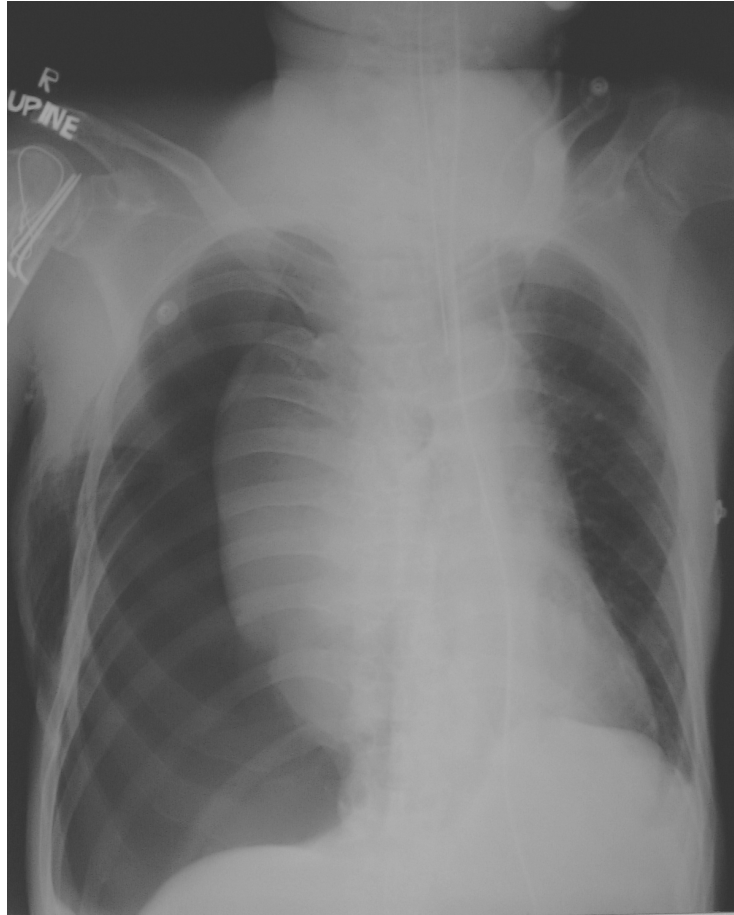
TOPIC SPECIFICATION: ENDOCRINOLOGY

9. Counseling station interactive station.

This 45 year old obese lady who is a known diabetic has presented to you with a fasting blood sugar level of 220 mg/dl. Please counsel her regarding her illness.

TOPIC SPECIFICATION: COUNSELLING/ DIABETES

10. This 40 year gentleman has presented with sudden onset of chest pain and severe dyspnoea.
- What is the abnormality on this chest x-ray.
 - Name two important physical findings which confirm the diagnosis.
 - What is the emergency management?



TOPIC SPECIFICATION: PULMONOLOGY

12.(Interactive station)

SIMULATED PATIENT

Examiner's opening statement. "This 30 year old gentleman has presented to the emergency with haematemesis. How would you proceed to manage this patient?"

TOPIC SPECIFICATION: GASTROENTROLOGY

13. This is the laboratory report of a 55 year old man who has had poorly controlled diabetes and hypertension for the last 20 years.

- pH 7.1
- pCO₂ 20 mmHg
- pO₂ 90 mmHg
- HCO₃ 10 mEq/l
- Blood glucose 176 mg/dl
- Potassium 6.1 mEq/l
- Sodium 132 mEq/l
- Blood urea 210 mg/dl

- d) What abnormally related to acid base balance this patient has?
- e) What is the underlying cause of these metabolic abnormality?
- f) List two definitive treatments for the underlying condition.

TOPIC SPECIFICATION: NEPHROLOGY

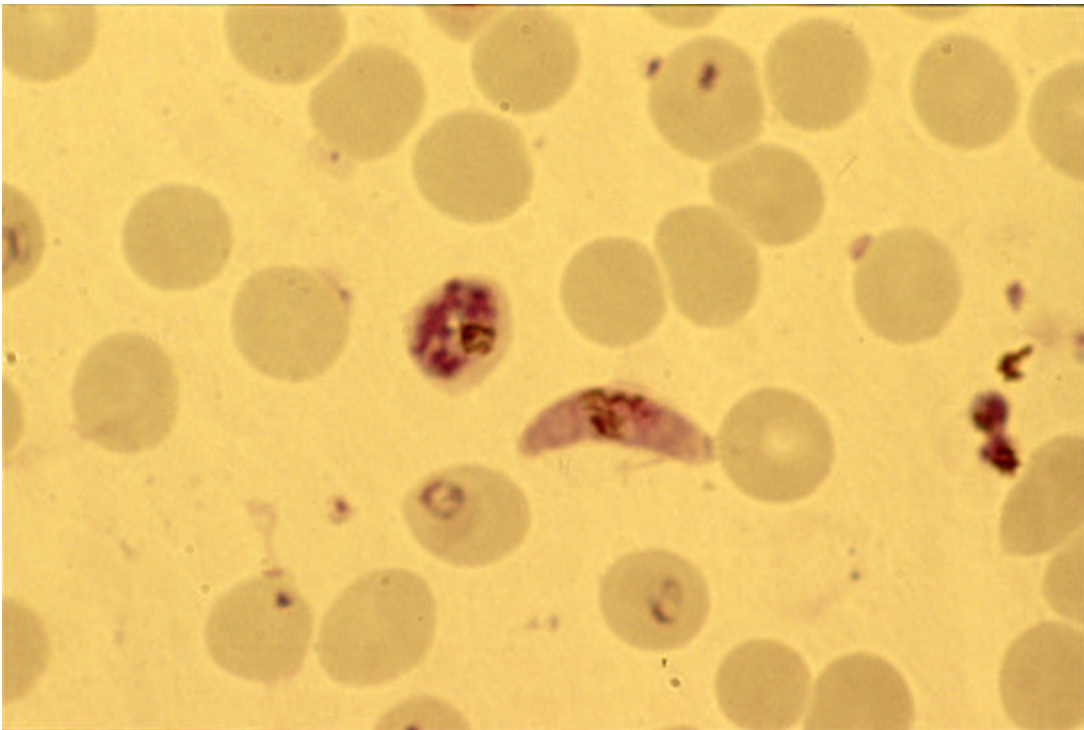
14. A 20 year old woman has presented to the psychiatry outpatients department accompanied by her mother. She complains of hearing voices in her head threatening to poison her, and commenting upon her every move. She has had these complaints for last 7 months and her family believes that she is possessed by *jins*.

- a. What is the most likely diagnosis?
- b. Name 2 drugs used in treatment?

TOPIC SPECIFICATION: PSYCHIATRY

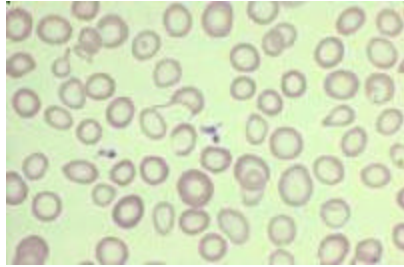
15. A 17 year old boy has presented with a febrile illness which recurs every third day. The fever is high grade and accompanied by chills and rigors. This is the peripheral blood smear of this patient.

- a. What abnormality is seen in this blood smear?
- b. Name 2 drugs used in its treatment.
- c. Name one important complication



TOPIC SPECIFICATION: INFECTIOUS DISEASES

16. A 40 year old mother of 6 children has had menorrhagia for several months. This is her peripheral blood smear.



- a) What does the peripheral smear show?
- b) What is the most likely cause in this patient?
- c) What laboratory tests you will perform to confirm the diagnosis?

TOPIC SPECIFICATION: HEMATOLOGY

KEY/Typical answer

Q	Answer
1	a) Right sided facial palsy b) Flattened nasolabial fold on right side and shifting of angle of mouth toward unaffected side
2	a) Hyperdense opacity in temporal lobe b) Hypertension and congenital arteriovenous malformations/aneurisms c) Mannitol, NG tube and Foley's catheterization
3	a) Rheumatoid arthritis b) Methotrexate, leflunomide, quinine, sulphasalazine etc. c) Ulnar deviation
4	a) Lumbar puncture or spinal puncture needle b) Meningitis, encephalitis, subarachnoid haemorrhage c) Raised ICP, local sepsis and extremely restless patient
5	a) Water retention, hyperglycaemia and osteoporosis b) Severe attack of bronchial asthma, raised ICP due to tumor and anaphylaxis
6	a) Typical lesion of Herpes Zoster b) Herpes Zoster Virus/ chicken pox virus c) Acyclovir
7	a) Enlarged cardiac shadow and convexity in left upper border (mitralization) b) Mitral stenosis/regurgitation c) Rheumatic heart disease/rheumatic fever in childhood
8	a) Hyperthyroidism due to Grave's disease b) Tachycardia, diffuse enlargement of thyroid gland and a bruit over thyroid c) TFTs i.e. T4, T3, TSH and Iodine uptake test or thyroid USG
9	a) Explains about the normal fasting sugar value and significance of exercise, diet and proper medication
10	b) Pneumothorax c) Intubation or chest puncture with any needle suspicion of tension pneumothorax d) Decreased breath sounds and resonant percussion
11	a) History, physical examination b) I/V line, blood transfusion, coterie infusion. c) When stable USG, endoscopy and sclerotherapy or banding if varicies
12	a) Metabolic acidosis b) Renal failure c) Dialysis (peritoneal followed by haemodialysis), renal transplant
13	a) Schizophrenia b) Haloperidol, phenothiazines or atypical anti psychotics
14	a) RBCs containing malarial parasites b) Chloroquine, quinine, halofantrine or artemether (any two should be accepted correct)
15	a) Severely hypochromic and microcytic picture b) Chronic iron deficiency c) Pallor, koilonychia and atrophic tongue